

**DRY CLEANING RISK SCREENING FORM****DATA FORM D(a)**

Plant Name: \_\_\_\_\_ Phone: \_\_\_\_\_ Plant No. \_\_\_\_\_

Please complete the following form to allow the District to evaluate the risk from your facility. Indicate (circle one) if the ventilation system: a) is existing or b) is a proposed modification to reduce risk or c) is for a new facility. Non-residential facilities must meet the ventilation requirements of Regulation 11, Rule 16, Section 307.2 unless, based on the information that you provide on this form, risk can be demonstrated to be acceptable (see sections 301.5 and 302.2). Co-residential facilities must meet the requirements of Section 307.1 (Vapor Barrier Rooms).

Risk from a dry cleaning facility is dependent on the amount of emissions, proximity (nearness) to receptors, local meteorology (weather conditions), and how the emissions are released (type of ventilation system used). Ventilation enhances dispersion (reduces risk) and reduces the exposure inside the building where the machine is operating. Six major types of ventilation used in dry cleaners (in descending order of effectiveness) are Vapor Barrier Rooms, Partial Vapor Rooms, local ventilation, general ventilation, window fans, and natural ventilation. A secondary control system or a fugitive control system also reduces fugitive emissions and associated risk. Building dimensions may also affect dispersion.

A Vapor Barrier Room (VBR) is constructed of diffusion resistant materials and completely surrounds the dry cleaning machine. VBRs are required for co-residential dry cleaning facilities in the Bay Area and recommended for non-residential facilities that result in high exposures of perc to adjacent residential or commercial/industrial receptors (particularly in co-located situations such as multistory buildings and shopping malls that do not have good separation between units). A Partial Vapor Room (PVR) encloses the back of a dry cleaning machine in a small room with the front panel and loading door exposed for convenient loading and unloading. PVRs are necessary for some non-residential facilities in order to achieve acceptable risks. Most existing facilities have general ventilation (large fans that vent the entire shop) or natural ventilation (no fans). Local ventilation (fume hoods and shrouds) and general ventilation depend on high rates of airflow and large fans to be effective. Vapor Barrier Rooms and Partial Vapor Rooms are more effective and may be less costly to operate considering the smaller fans needed to achieve good capture. Most new facilities need VBRs or PVRs.

Natural ventilation (open windows and doors -- no fans) depends upon wind and convective forces to move air. This is not very effective, dispersion is usually very poor, and nearby receptors may be exposed to a high risk. In addition, people within the building are not adequately protected. Natural ventilation is usually acceptable for a stand-alone facility with a reasonable buffer zone (vacant area around the facility that separates the dry cleaner from nearby people in order to protect them). A buffer zone of 200-300 feet is usually adequate for a existing facility that uses less than 100 gallons of Perc per year and uses natural ventilation. For facilities using window fans, emissions are also released near ground level and poorly dispersed. Consequently, risk is similar to facilities using natural ventilation and similar buffer zones are necessary. If a facility is located near residential receptors, uses more than 100 gallons of Perc, or is co-located with other commercial businesses, enhanced ventilation (VBR or PVR) may be necessary.

Note that for emissions we use the following formulas:

Solvent consumption = (solvent purchases) + (inventory at start of year) - (inventory at end of year)

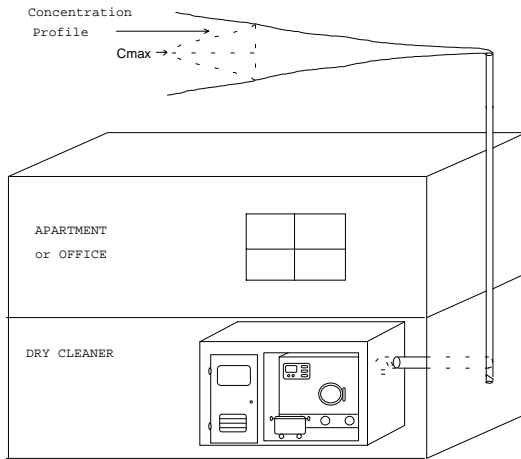
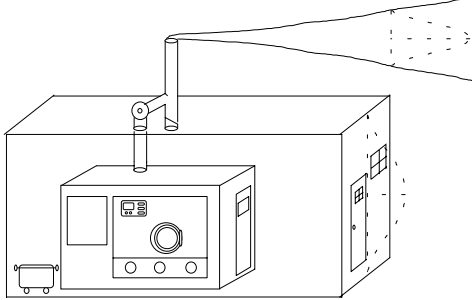
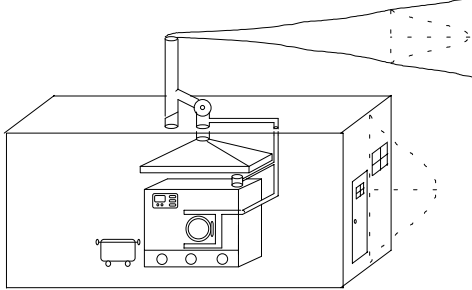
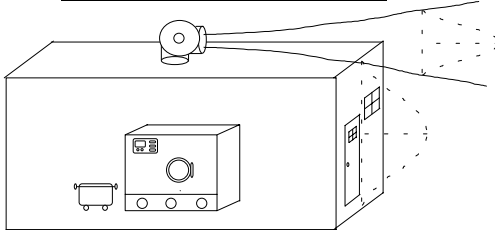
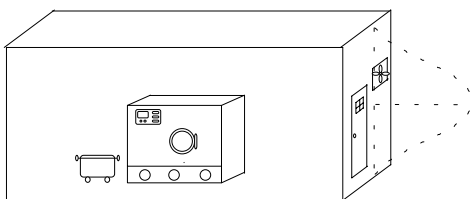
Solvent emissions = (solvent consumption) - (waste credit)

Waste credit = (still residue) (solvent content in still residue) + (number of filter cartridges) (solvent per cartridge)

Default values are 50 vol% for still residue, 0.5 gal/cartridge (standard or split), and 1.0 gal/jumbo cartridge.

Note that we don't allow waste credit for more than 30% of solvent consumption unless fully explained and documented by the facility. **Do not include waste water in waste credit.**

**NOTE: In order to assess the risk from your facility, we need information about the location and size of your facility, your building, nearby buildings, and the location of any people that may be affected by the emissions from your facility. You must submit a facility sketch and local map that shows your facility, location of source, isolation room (if applicable), location of stack (if applicable), your building, and all nearby buildings within 150 feet. Indicate those buildings that contain residences. Indicate the closest residence and location. Show important distances and dimensions on the map (must be drawn to scale). If any building has irregular dimensions, please indicate the major dimensions on the sketch. For example, shopping malls may have several different heights and irregular shapes.**

**#1: VAPOR BARRIER ROOM** (machine completely inside room)**#2: PARTIAL VAPOR ROOM** (machine partially inside isolation room, with front panel and loading door exposed)**#3: LOCAL VENTILATION SYSTEM****#4: GENERAL VENTILATION** (entire shop)**#5: NATURAL VENTILATION** (No Fan) or  
**#6: WINDOW FAN**

Answer **all** questions below that apply to your facility.

- (1) Indicate your type of facility (check one only):  
☐ Co-residential    ☐ Co-commercial    ☐ Stand-alone
- (2) Check the box for the illustration that best represents your shop's ventilation system:  
☐ #1: Vapor Barrier Room (VBR)  
☐ #2: Partial Vapor Room (PVR)  
☐ #3: Local Ventilation System (LOC)  
☐ #4: General Ventilation (GEN)  
☐ #5: Natural Ventilation (NAT)  
☐ #6: Window Fan (WIN)
- (3) Are emissions released vertically through a stack? (check one)

☐ YES    or    ☐ NO

- a. What is fan air flowrate?  $Q =$  \_\_\_\_\_ CFM  
 (>1000 cubic feet / minute)
- b. What is height of stack?  $H_S =$  \_\_\_\_\_ feet (from ground level)
- c. What is diameter of stack?  $D_S =$  \_\_\_\_\_ inches
- (4) If you checked #1 (VBR) or #2 (PVR), answer the following:  
 d. What are dimensions of VBR or PVR?  
 Room Height,  $H_R =$  \_\_\_\_\_ feet  
 Room Width,  $W_R =$  \_\_\_\_\_ feet  
 Room Length,  $L_R =$  \_\_\_\_\_ feet
- (5) Building and Shop Dimensions (all facilities must answer):  
 a. What are dimensions of facility (shop) or cleaning room?  
 Facility Height,  $H_F =$  \_\_\_\_\_ feet  
 Facility Width,  $W_F =$  \_\_\_\_\_ feet  
 Facility Length,  $L_F =$  \_\_\_\_\_ feet
- b. What are dimensions of the entire building?  
 Building Height,  $H_B =$  \_\_\_\_\_ feet  
 Building Width,  $W_B =$  \_\_\_\_\_ feet  
 Building Length,  $L_B =$  \_\_\_\_\_ feet
- c. What are dimensions of nearby buildings (within 150 feet)? Note on sketch if more than one nearby building.  
 Building Height,  $H_{B2} =$  \_\_\_\_\_ feet  
 Building Width,  $W_{B2} =$  \_\_\_\_\_ feet  
 Building Length,  $L_{B2} =$  \_\_\_\_\_ feet
- (6) Record distance to receptors (all facilities must answer):  
 a. What is distance from your shop to nearest business?  
 $D_C =$  \_\_\_\_\_ feet
- b. What is distance from your shop to nearest residence?  
 $D_R =$  \_\_\_\_\_ feet

Indicate the specific location of these receptors on the map.

I certify the information contained on this form is accurate and true to the best of my knowledge:

\_\_\_\_\_  
 (Signature of responsible party)

\_\_\_\_\_  
 (Date)

**DISPERSION DATA**